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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/820,891

04/08/2004

Victor F. Man

1357US12

8889

43896

7590

01/10/2008

ECOLAB INC.

MAIL STOP ESC-F7, 655 LONE OAK DRIVE

EAGAN, MN 55121

EXAMINER

KUMAR, PREETI

ART UNIT

PAPER NUMBER

1796

MAIL DATE

DELIVERY MODE

01/10/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/820,891	Applicant(s) MAN ET AL.	
	Examiner Preeti Kumar	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114.

Applicant's submission filed on 10/29/2007 has been entered.

Response to Amendment

2. Claims 1-10, and 14 are pending. Claims 11-13 and 15-27 are cancelled.
3. The rejection of claims 11-13 under 35 U.S.C. 112, second paragraph is withdrawn in light of Applicants cancellation of the claims.
4. The objection of claims 11-13 under 37 CFR 1.75(c), is withdrawn.
5. The provisional rejection of claims 1-10, 14 on the grounds of nonstatutory double patenting over claims 1-23 of copending Application No. 10/208,404 is withdrawn in light of Applicants filing of a terminal disclaimer dated 10/29/2007.
6. The rejection of claims 1-10, 14 on the grounds of nonstatutory double patenting over claims of U. S. Patent No. 6,624,132 is withdrawn in light of Applicants filing of a terminal disclaimer dated 10/29/2007.

Response to Arguments

7. Applicant's arguments filed 10/29/2007 have been fully considered. See the new grounds of rejection below.

New Grounds of Rejection

Priority

8. Applicant's claim for the benefit of a prior-filed application under 35 U.S.C. 119(e) or under 35 U.S.C. 120, 121, or 365(c) is acknowledged in view of Applicants amendment to the claims to be commensurate in scope to the disclosure of the prior-filed application, Application No. 10/208,404 and 09/606,478.

New Grounds of Rejection

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claims 1-10, 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Linard et al. (US statutory invention registration H1776) in view of Blake et al. (US 5,648,329).

Linard et al. teach heavy duty, enzyme-containing, aqueous liquid detergent including at least one surfactant selected from the group consisting essentially of synthetic anionic detergents, nonionic surfactants, amphoteric surfactants; at a level of up to 60% by weight, protease enzymes and an enzyme stabilizing system. The detergent has a neat liquid pH of 9.5 or greater, a solution pH or 8.5 or greater. See abstract, col.5, ln.1 and col.7, ln.10-40 and 60-65. Linard et al. teach that the composition may contain builders, polyols, 0.1% to about 10% alkanolamines and boron compounds. See col.6-7. Linard et al. teach protease, or amylase, cellulase, lipase or mixtures thereof for stain removal. See col.4,ln.55.

In table 5, Linard et al. illustrate cleaning performances of various compositions based on enzyme cleaning performance in the casein test cloth column and alkalinity cleaning performance in the fatty acid/vacuum cleaner dust cloth column. Example composition I comprises monethanolamine, triethanolamine, borax pentahydrate and alkaline protease having a value of 76 in casein test cloth cleaning illustrating effective enzyme cleaning performance. See table 5. Furthermore, Linard et al. teach that compositions I-VII have the unique combination of high alkalinity, high alkalinity reserve and enzyme effectiveness.

Linard et al. do not teach a liquid enzyme composition that retains about 80% of its initial activity at ambient temperature for at least 30 days as recited by the independent claim 1. Also, Linard et al. do not teach the claimed 10-20% alkanolamine borate of claims 2 and 3.

Blake et al. teach a liquid premix for use in a detergent composition comprising an effective amount of borate-containing material to prevent crystallization and/or precipitation of the liquid premix when stored for at least 2 weeks at 20 .degree. C. See abstract. Also, regarding stability, Blake et al. teach that the hydrolytic degradation of the amide at 35.degree. C. typically results in a decrease in the amide level of about 4% per month. However, the premix can be stored at 20.degree. C., at which temperature the decrease in the level of amide is less than 1% per month. See col.4, ln.40-46.

Blake et al. teach that the borate functional material can be borax or boric acid or sodium metaborate, and monoethanolamine borate. See col.4, ln.14. Blake et al. teach an "effective amount" of the borate material is an amount that maintains the premix as a stable liquid and provides a premix viscosity in the desired range below about 20 000 mPas. Typically, from about 3% to about 30% of borate will suffice, from about 5% to about 10%. See col.3, ln.42-45.

In example 3, Blake et al. teach boric acid powder which is free of sodium ions. Blake et al. specifically teach 16% water is used to prepare the monoethanolamine solution. Also one of ordinary skill in the art would have been motivated to optimize the amount of water in the composition, since Blake et al. suggest dissolving the borate material in water. Also one of ordinary skill in the art would have been motivated to modify the composition taught by Blake et al. with an enzyme because Blake et al. suggest modification with enzymes in general. See col.4,ln.56.

It would have been obvious to one of ordinary skill in the art, to formulate a liquid enzyme composition that retains about 80% of its initial activity at ambient temperature for 30 days as recited by independent claim 1 because the teachings of Linard et al. suggest that it is beneficial to incorporate enough alkalinity reserve into the formulation to maintain a high pH when diluted to about a 0.2% solution in water and maintain acceptable enzyme stability over long storage periods. See col.2, ln.1-5 and col.10,ln.40-50 and col.11,ln.55-65. And furthermore, Blake et al. teach a detergent composition having enzyme stability for at least 2 weeks and further suggest stability of enzyme in a composition having the same components in the same ratio as recited by the instant claims, and thus would be expected to have the same property of enzyme stability and initial activity.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made to arrive at a cleaning composition substantially free of sodium ions comprising 10 to 20% alkanolamine borate as recited by the instant claims 2-3, with a reasonable expectation of success and similar results, because Blake et al. teach a cleaning composition comprising borate functional material which is free of sodium ions including borax or boric acid or sodium metaborate, and monoethanolamine borate, and Linard et al. teach alkali metal borates including borax in general. One of ordinary skill in the art would have been motivated to combine the teachings of Linard et al. with that of Blake et al. because Linard et al. teach alkali metal borates including borax in general for use in the alkaline composition and Blake et al. teach a cleaning composition

comprising borate functional material which is free of sodium ions including borax or boric acid or sodium metaborate, and monoethanolamine borate.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Preeti Kumar whose telephone number is 571-272-1320. The examiner can normally be reached on 6:30 am-2:30 pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Examiner Preeti Kumar
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/PK/

/Vasu Jagannathan/
Supervisory Patent Examiner
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